

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A QoS control system using a wireless LAN network, comprising:

a wireless LAN base station connected to the wireless LAN network; and

one or a plurality of wireless LAN terminals connected to the wireless LAN base station via the wireless LAN network, wherein

said wireless LAN base station comprises

means for receiving information for identifying the wireless LAN terminal and a QoS service content of a user whose authentication is required from a server via a communication network, the server being configured to, when the user of the wireless LAN network requires a user's authentication from the wireless LAN terminal, authenticate the user of the wireless LAN network whose authentication is required based on a recorded user's authentication information and notify the wireless LAN base station of the information and the QoS service content, the QoS service content including a priority information,

means for receiving information for identifying the wireless LAN terminal from the wireless LAN terminal via the wireless LAN network, and

means for carrying out priority control in accordance with the priority information of the QoS service content from the server, if the information for identifying the wireless LAN terminal from the wireless LAN terminal corresponds to that from the server, and wherein

said wireless LAN terminal comprises

means for requiring the user's authentication the wireless LAN base station,

means for receiving the priority information of the QoS service content notified from the server via the wireless LAN base station, and

means for carrying out the priority control in accordance with the priority information, and wherein

said server comprises:

an authentication server which stores the authentication information for each user of the wireless LAN network and notifies the information for identifying the wireless LAN terminal and a user information of the user, when the user of the wireless LAN network carries out authentication request from the wireless LAN terminal via the wireless LAN base station,

and

a policy server which stores QoS service content for each user and notifies the wireless LAN base station of QoS service content corresponding to the user information notified from the authentication server together with the information for identifying the wireless LAN terminal.

2. (canceled).

3. (currently amended): The QoS control system according to claim-21, wherein

said authentication server or the policy server is included in an exchanger to accommodate VoIP (Voice over Internet Protocol).

4. (currently amended): A wireless LAN base station for communicating with a one or a plurality of wireless LAN terminals via a wireless LAN network, said wireless LAN base station comprising:

means for receiving information for identifying the wireless LAN terminal and a QoS service content of a user whose authentication is required from a server via a communication network, the server being configured to, when the user of the wireless LAN network requires a user's authentication from the wireless LAN terminal, authenticate the user of the wireless LAN network whose authentication is required based on recorded user authentication information and notify the wireless LAN base station of the information and the QoS service content, the QoS service content including a priority information;

means for receiving information for identifying the wireless LAN terminal from the wireless LAN terminal via the wireless LAN network; and

means for carrying out priority control in accordance with the priority information of the QoS service content from the server, if the information for identifying the wireless LAN terminal from the wireless LAN terminal corresponds to that from the server, and wherein

said server comprises:

an authentication server which stores the authentication information for each user of the wireless LAN network and notifies the information for identifying the wireless LAN terminal and a user information of the user, when the user of the wireless LAN network carries out authentication request from the wireless LAN terminal via the wireless LAN base station, and

a policy server which stores QoS service content for each user and notifies the wireless LAN base station of QoS service content corresponding to the user information notified from the authentication server together with the information for identifying the wireless LAN terminal.

5. (currently amended): A wireless LAN terminal for communicating with a wireless LAN base station via a wireless LAN network, the wireless LAN base station comprising:

means for requiring a user's authentication to the wireless LAN base station, wherein the wireless LAN base station receives information for identifying the wireless LAN terminal and a QoS service content of a user whose authentication is required from a server via a communication network, the server is configured to authenticate the user of the wireless LAN network whose authentication is required based on a recorded user's authentication information and notify the wireless LAN base station of the information and the QoS service content, and the QoS service content includes a priority information;

means for receiving the priority information of the QoS service content notified from the server via the wireless LAN base station; and

means for carrying out the priority control in accordance with the priority information, if the information for identifying the wireless LAN terminal from the server is correct, and wherein said server comprises:

an authentication server which stores the authentication information for each user of the wireless LAN network and notifies the information for identifying the wireless LAN terminal and a user information of the user, when the user of the wireless LAN network carries

out authentication request from the wireless LAN terminal via the wireless LAN base station,
and

a policy server which stores QoS service content for each user and notifies the
wireless LAN base station of QoS service content corresponding to the user information notified
from the authentication server together with the information for identifying the wireless LAN
terminal.

6. (currently amended): A QoS control method of a wireless LAN network including a wireless LAN base station and one or a plurality of wireless LAN terminals to be connected to the wireless LAN base station, said method comprising the steps of:

performing a first step by a server connected to the wireless LAN base station via the wireless LAN network, comprising the steps of

authenticating a user of the wireless LAN network whose authentication is required based on a recorded user's authentication information, when the user of the wireless LAN network requires a user's authentication from the wireless LAN terminal, and

notifying the wireless LAN base station of information for identifying the wireless LAN terminal and a QoS service content of a user whose authentication is required from a server via a communication network, the QoS service content including a priority information;

performing a second step by the wireless LAN base station comprising the steps of

receiving the information for identifying the wireless LAN terminal and the QoS service content of a user whose authentication is required from the server via the communication network,

receiving information for identifying the wireless LAN terminal from the wireless LAN terminal via the wireless LAN network, and

carrying out priority control in accordance with the priority information of the QoS service content from the server, if the information for identifying the wireless LAN terminal from the wireless LAN terminal corresponds to that from the server; and

performing a third step by the wireless LAN terminal comprising the steps of
requiring a user's authentication the wireless LAN base station,
receiving the priority information of the QoS service content notified from the server via the wireless LAN base station, and

carrying out the priority control in accordance with the priority information, and
wherein

said server comprises:
an authentication server which stores the authentication information for each user of the wireless LAN network and notifies the information for identifying the wireless LAN terminal and a user information of the user, when the user of the wireless LAN network carries out authentication request from the wireless LAN terminal via the wireless LAN base station,
and

a policy server which stores QoS service content for each user and notifies the wireless LAN base station of QoS service content corresponding to the user information notified from the authentication server together with the information for identifying the wireless LAN terminal.

7. (currently amended): A QoS control program for enabling a computer of wireless LAN base station to execute a QoS control method of a wireless LAN network, said wireless LAN network including the wireless LAN base station and one or a plurality of wireless LAN terminals to be connected to the wireless LAN base station, said QoS control method comprising the steps of:

receiving authentication request from the wireless LAN terminal;

adding the received authentication request to information with respect to the wireless LAN base station;

transmitting the added authentication request to a server, wherein the server is connected to the wireless LAN base station via the wireless LAN network, the server is configured to authenticate a user of the wireless LAN network whose authentication is required based on a recorded user's authentication information and to notify the wireless LAN base station of information for identifying the wireless LAN terminal and a QoS service content of a user whose authentication is required from a server via a communication network, and the QoS service content includes a priority information;

if the server does not authenticate the user whose authentication is requested, transmitting the information indicating that the server fails to authenticate the user, to the wireless LAN terminal; and

if the server authenticates the user whose authentication is requested, carrying out priority control with respect to the wireless LAN terminal defined by the information for identifying the wireless LAN terminal from the server in accordance with the priority information of the QoS service from the server, and wherein

said server comprises:

an authentication server which stores the authentication information for each user of the wireless LAN network and notifies the information for identifying the wireless LAN terminal and a user information of the user, when the user of the wireless LAN network carries out authentication request from the wireless LAN terminal via the wireless LAN base station, and

a policy server which stores QoS service content for each user and notifies the wireless LAN base station of QoS service content corresponding to the user information notified from the authentication server together with the information for identifying the wireless LAN terminal.

8. (currently amended): A QoS control program for enabling a computer of wireless LAN terminal to execute a QoS control method of a wireless LAN network, said wireless LAN network including a wireless LAN base station and the wireless LAN terminal to be connected to the wireless LAN base station, said QoS control method comprising the steps of:

requiring a user's authentication to the wireless LAN base station, wherein the wireless LAN base station receives information for identifying the wireless LAN terminal and a QoS service content of a user whose authentication is required from a server via a communication network, the server is configured to authenticate the user of the wireless LAN network whose authentication is required based on a recorded user's authentication information and notify the wireless LAN base station of the information and the QoS service content, and the QoS service content includes a priority information;

receiving the priority information of the QoS service content notified from the server via the wireless LAN base station; and

carrying out the priority control in accordance with the priority information, if the server authenticates the user whose authentication is requested, and wherein

said server comprises:

an authentication server which stores the authentication information for each user of the wireless LAN network and notifies the information for identifying the wireless LAN terminal and a user information of the user, when the user of the wireless LAN network carries out authentication request from the wireless LAN terminal via the wireless LAN base station, and

a policy server which stores QoS service content for each user and notifies the wireless LAN base station of QoS service content corresponding to the user information notified from the authentication server together with the information for identifying the wireless LAN terminal.